

**REMARKS**

Claims 1, 4 - 6, 8 and 10 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention. It is believed that this Amendment is fully responsive to the Office Action dated December 18, 2002.

Claims 1 - 8 and 10 are presently being examined, claim 9 having been cancelled in the response to the first Office Action.

Claims 1 - 3 are rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicants regard as the invention for the specific reason set forth in the last full paragraph on page 2 of the outstanding Action. The applicants respectfully request reconsideration of this rejection.

As indicated above, claim 1 has been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention, and in order to correct certain informalities, including those which have been pointed out by the Examiner.

Accordingly, the withdrawal of the outstanding indefiniteness rejection under 35 USC §112 is in order, and is therefore respectfully solicited.

As to the merits of this case, the following rejections are set forth in the outstanding Action:

(1) claims 4 and 5 are again rejected under 35 USC §102(b) as being anticipated by JP 05-000390;

(2) claims 6 and 7 are again rejected under 35 USC §102(b) as being anticipated by JP 8-111551;

(3) claim 8 is rejected under 35 USC §102(b) as being anticipated by a newly cited reference, Smith (U.S. Patent No. 4,362,364); and

(4) claim 10 is rejected under 35 USC §102(b) as being anticipated by a newly cited reference, Judd et al. (U.S. Patent No. 3,980,397).

The applicants respectfully request reconsideration of these rejections.

In the applicants' claimed invention, as set forth in the amended claims filed herein, when the laser light passes through the slit opening, the laser light, which is irradiated to the slit member around the opening, heats the slit member. As a result of the heating, gas temperature distribution occurs to the slit opening area, and refraction index distribution occurs to the area. As a result, the wavefront of the laser light passing through the slit is distorted, which causes the problem of having

an adverse effect on the band narrowing performance. Consequently, it is necessary to prevent the refraction index distribution from occurring to the slit opening area, and the applicants' present claimed invention provides various means for prevention.

It is also respectfully submitted that the problems to be solved are now set forth in the language of the amended claims, as suggested by the Examiner.<sup>1</sup>

As to the cited references, none of the cited prior art reference, relied upon by the Examiner, disclose the claimed elements or features now included in the amended language of the claims filed herewith.

For example, Judd et al. teaches the adjustment of the intensity distribution of the transmission light by causing refraction index distribution to the solid of the light transmitting sections. Such teaching however is unrelated to the technical object of relieving the refraction index distribution of the light transmitting sections, and has no relationship to a narrow band laser.

In view of the above, since not all of the claimed elements or features are found in exactly the same situation and united in the same way to perform the identical function in any of the cited references, there can be no anticipation under 35 USC §102(b) of the applicants' claimed invention,

---

<sup>1</sup>See, lines 8 - 12, page 2 of the outstanding Action.

U.S. Patent Application Serial No. 09/926,662

as now set forth in the amended claims filed herewith.

Accordingly, the withdrawal of the outstanding anticipation rejections under 35 USC §102(b) based on JP 05-000390, JP 8-111551, Smith (U.S. Patent No. 4,362,364) or Judd et al. (U.S. Patent No. 3,980,397) is in order, and is therefore respectfully solicited.

In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

U.S. Patent Application Serial No. 09/926,662

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP



Mel R. Quintos  
Attorney for Applicants  
Reg. No. 31,898

MRQ/lrj/ipc

Atty. Docket No. 011405  
Suite 1000,  
1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



23850

PATENT TRADEMARK OFFICE

Enclosures: Version with markings to show changes made

H:\HOME\MEL\TRANSFER\ALL - AMENDMENTS - RESPONSES- PTO FILINGS\011405 AMENDMENT due 3-18-03

**VERSION WITH MARKINGS TO SHOW CHANGES MADE 09/926,662**

**IN THE CLAIMS:**

Please amend claims 1, 4 - 6, 8 and 10 as follows:

1. (Twice Amended) A narrow band ultraviolet laser device comprising light shielding elements having

light transmitting sections each constituted by an opening for transmitting laser light, [and]  
light shielding sections that surround said light transmitting sections, to remove undesired  
laser light from an optical path and shape the laser light into a predetermined form, and

[wherein] heating means for heating [said light transmitting sections are included] an area in  
the vicinity of said light shielding elements to relieve ununiformity of the temperature of gases inside  
said light transmitting sections.

4. (Twice Amended) A narrow band ultraviolet laser device comprising light shielding elements having

light transmitting sections for transmitting laser light, and light shielding sections that  
surround said light transmitting sections, remove undesired laser light from an optical path and shape  
the laser light into a predetermined form,

wherein spraying means [for spraying an inert gas is included in the vicinity of said  
light shielding elements] for relieving ununiformity of the temperature of the gases inside said light  
transmitting sections by spraying an inert gas to the vicinity of said light shielding elements and

replacing the gases in said light shielding element area.

5. (Twice Amended) A narrow band ultraviolet laser device comprising light shielding elements having

light transmitting sections for transmitting laser light, and

light shielding sections that surround said light transmitting sections, remove undesired laser light from an optical path and shape the laser light into a predetermined form,

wherein since said light shielding sections are formed of a material including at least any one of aluminum, aluminum alloy and copper, the light shielding sections reflect the laser light at high reflectivity, thus causing less light absorption of the light shielding elements and less rise in the temperature of the light shielding sections, and as a result, the light shielding sections relieve ununiformity in the temperature of the gases inside the light transmitting sections.

6. (Twice Amended) A narrow band ultraviolet laser device comprising light shielding elements having light transmitting sections for transmitting laser light, and

light shielding sections that surround said light transmitting sections, remove undesired laser light from an optical path and shape the laser light into a predetermined form,

wherein [said light shielding sections are formed of a material which transmits the laser light] since said light shielding sections are formed of a solid material which transmits the laser light, gases do not exist in the laser light area, thus causing no refraction index distribution caused by temperature distribution of the gases, and have a function of removing the undesired light from the

optical path.

8. (Twice Amended) A narrow band ultraviolet laser device comprising light shielding elements for removing undesired laser light from an optical path and shaping laser light into a predetermined form, and

light transmitting sections [formed]bordered by said light shielding elements, for transmitting the laser light,

112 wherein said light shielding elements are formed of a material which transmits the laser light, thus causing less light absorption of the light shielding elements and less rise in temperature of the light shielding sections, and as a result, said light shielding elements relieve ununiformity in the temperature of the gases inside the light transmitting sections, and have a function of refracting the laser light to remove the undesired laser light from the optical path.

10. (Twice Amended) A narrow band ultraviolet laser device comprising light shielding elements having

light transmitting sections for transmitting laser light, and light shielding sections that surround said light transmitting sections, remove undesired laser light from an optical path and shape the laser light into a predetermined form,

wherein since said light transmitting sections are formed of a solid which transmits the laser light, gases do not exist in the laser light area, and refraction index distribution caused by the temperature distribution of the gases does not occur.